Maryland Hospital Quality-Based Reimbursement Initiative: New Measures Draft Discussion Document

(This document has been revised from the original draft based on July 11 and July 22, 2008 EWG meeting discussions and on additional "real-time" measure updates received/discovered.)

The Initiation Work Group of the QBR Initiative generally agreed to using the principles listed below to guide the selection of measures to be used in quality-based reimbursement for hospitals in Maryland. While it was expected that not all measures will meet all the principles absolutely, collectively they should reflect aspects of quality and safety.

- Measures should reflect aspects of performance that hospitals can control and influence
- Measures should reflect common processes in the delivery of care across Maryland hospitals
- Measures should be evidence-based whenever possible
- Measures should describe aspects of safer practices
- Measures chosen should foster and encourage quality improvement
- Data needed to construct the measures should be readily available either to the HSCRC or to the individual hospitals
- Areas of performance to be measured should be prioritized, with some measures phased in at a later date
- Qualitative measures should not be excluded a priori
- The construct of the measures or the measures themselves may change after pilot test data are evaluated and as knowledge evolves

The criteria in Figure 1 below were also considered in initial measure selection of the 19 process measures for the QBR Initiative and should be considered when recommending new candidate measures for the Maryland QBR Initiative.

Figure 1. Measure Selection Criteria

Importance or relevance, including:*	Scientific acceptability/ soundness, including:*	Usability, including:*	Feasibility, including:*
• Leverage point for improving quality • Performance in the area is suboptimal • Aspect of quality is under provider control • Considerable variation in quality of care exists	• Well-defined and precisely specified • Reliable • Valid ("accurately representing the concept") • Precise, adequate discrimination • Adequate, specified risk-adjustment • Evidence linking process measures to outcomes	• Can be used by at least one stakeholder audience for decision-making • Performance differences are statistically meaningful • Performance differences are clinically meaningful • Any methods for aggregating measure are defined	• Point of data collection tied to care delivery, when feasible • Timing and frequency of measure collection are specified • Benefit of measurement is evaluated against financial and administrative burden • Auditing strategy is designed and can be implemented • Confidentiality concerns can be addressed

*These criteria are those used by the National Quality Forum in evaluating measures considered for endorsement through the NQF Consensus Development Process.

Categories of measures the Evaluation Work Group should consider are defined in Figure 2 below and include structure, process, outcome and patient experience measures. Additionally, definitions for "quality measures" and for each of the quality measures used by the Agency for Healthcare Research and Quality are provided in **Appendix A**.

Figure 2. Measure Categories and Definitions

Structural Measures entail the conditions under which care is provided, such as: • Material resources (facilities, equipment) • Human resources (ratios, qualifications, experience) • Organizational characteristics (size, volume, systems)	**Process Measures** measure performance on the activities that constitute health care (adherence to guidelines), including such areas as: • Screening and diagnosis • Treatment and rehabilitation • Education and prevention	**Outcome Measures** are changes attributable to health care, Intermediate and final, such as: • Laboratory or vital sign value • Mortality, morbidity (complications, readmissions), functional status • Efficiency • Knowledge, attitudes, and behaviors	**Patient experience Measures** are those that are reported by the patient and may include the patient's perspectives on: • Outcomes of care (e.g., how well their pain is managed, their overall rating of the quality of the hospital care) • Processes of care (e.g., whether they received all recommended preventive treatment)

Figure 3 below contains a non-exhaustive table of candidate measures that identifies the category for each measure in the far left column. In addition, the table includes:

- the source/owner of the measure,
- whether the measure is currently reported or there is a plan for reporting it on HHS Hospital Compare[1] and/or the Maryland Hospital Performance Guide maintained by the Maryland Healthcare Commission (MHCC)[2],
- whether the measure has been nationally vetted and is currently endorsed by the National Quality Forum,
- whether the measure is/has been used in pay for performance programs, and
- additional notes important to consider or relevant about the measure.

To further support Evaluation Work Group Member review and prioritization of new QBR Initiative measures, following the table of candidate measures in Figure 3:

- **Appendix B** contains a table comparing the measures initially selected for the Maryland hospital QBR Initiative and those recommended by CMS to Congress for use in the Medicare hospital Value Based Purchasing Program.
- **Appendix C** contains a table of future proposed measures (Table 2) and implementation timeline (Table 1) for the MHCC Hospital Performance Guide.
- **Appendix D** contains CMS sets of final measures for Medicare pay for reporting for data collection beginning October 2008, and hospital acquired condition measures for which payment will be limited/ not provided beginning October 2008.
- **Appendix E** contains potential measure sets for Medicare pay for reporting for FFY 2011 and beyond.

Prior to the meeting on July 11, 2008, Evaluation Work Group members were asked to review the measures in the table in Figure 3 below and do the following:

- Add candidate measures that are missing from the chart that should be considered for future use.

[1] Available at: http://www.hospitalcompare.hhs.gov/. Last accessed June 20, 2008.
[2] Available at: http://mhcc.maryland.gov/consumerinfo/hospitalguide/index.htm. Last accessed June 20, 2008.

- In the far right column, code or rank the measures using the following:
    - "1"- measures that should be considered now for the QBR Initiative in the shorter term (12- 18 months)
    - "2"- measures that should be considered now for the QBR Initiative in the medium term (2-4 yrs)
    - "3"- measures that should possibly be considered for the QBR Initiative in the shorter term (12- 18 months)
    - "4"- measures that should possibly be considered for the QBR Initiative in the medium term (2-4 yrs)
    - "5"- measures that should not be considered for the QBR Initiative

At the July 11 meeting, the EWG members decided to make a "first pass" of the measures and remove those measures that should not be considered. Rationale for removing measures from the table included:

- The measure is currently addressed by the specified, already existing Joint Commission standards.
- For structural measures, there are related process or outcome measures the group would prefer to consider.
- There are other technical concerns or issues regarding the measure (e.g., inadequate risk adjustment).

At the July 22, 2007 EWG meeting, the group agreed that measures that have low sensitivity or specificity in distinguishing provider performance should also be excluded from consideration; this tends to particularly be the case for structural measures. In addition, the group requested that the measures be clustered by clinical or other related topical areas,

Figure 4 contains the measures removed from the table in Figure 3 based on the EWG's discussion.

Figure 3. Candidate Hospital Measures by Topic Area

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
	ICU CARE MANAGEMENT							
S	All patients in general intensive care units (ICUs) (both adult and pediatric) should be managed by physicians who have specific training and certification in critical care medicine ("critical care certified").	National Quality Forum	X			X	This is the second leap of the Leapfrog Hospital Survey in which 8 Maryland hospitals currently participate. WellPoint/Anthem uses this measure in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
	PATIENT SAFETY-GENERAL							
p	Hospital Survey on Patient Safety Culture (see **Appendix F**)	AHRQ					7/22/08- EWG discussion: agreement to keep this as a	

[3] See Appendix A for definitions as defined by AHRQ.

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
							structural measure versus a new "staff perception" category.	
S	Hospital maintains Maryland deemed status by meeting all Medicare Conditions of Participation. **(Appendix G)**	CMS/ Maryland OHCQ						
	INFORMATION TECHNOLOGY							
S	Implement a computerized prescriber order entry (CPOE) system built upon the requisite foundation of re-engineered evidence-based care, an assurance of healthcare organization staff and independent practitioner readiness, and an integrated information technology.	National Quality Forum	X			X	This is the first leap of the Leapfrog Hospital Survey in which 8 Maryland hospitals currently participate. WellPoint/Anthem uses this measure in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM). 7/11/08 EWG- More generally, the extent to which hospitals adopt IT systems and applications is of interest, so this measure should be broadened. MHCC is conducting survey of HIT in hospitals.	
	CARDIAC SURGERY							
S	Participation in a systematic database for cardiac surgery	Society of Thoracic Surgeons (STS)[4]	X				**Selected for use in Medicare pay for reporting starting FFY 2009.**	
S	For high-risk elective cardiac procedures or other specified care, patients should be clearly informed of the likely reduced risk of an adverse outcome at treatment facilities that participate in clinical outcomes registries and that minimize the number of surgeons performing those procedures with the strongest volume-outcomes relationship.	National Quality Forum	X			X	This is part of the third leap of the Leapfrog Hospital Survey in which 8 Maryland hospitals currently participate. 7/11/08- Some EWG members voiced concerns about use of volume measures.	
S	Surgical Volume - a. Isolated Coronary Artery Bypass Graft (CABG) Surgery, b. Valve Surgery, c. CABG+Valve Surgery	CMS	X				7/11/08- Some EWG members voiced concerns about use of volume measures.	
O	Percent of patients undergoing isolated CABG (without pre-existing renal failure)	STS [5]	X	Potentially planned for		X	WellPoint/Anthem uses subset of 5 STS CABG	

[4] Nationally, approximately 70% of cardiac surgeons participate in the STS database and are already collecting the STS process and outcome measures.

[5] In the 7/22/08 meeting, the EWG discussed the need to review the STS measures risk adjustment approach.

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	who develop post-operative renal failure or require dialysis.			future			outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM). 7/22/08- EWG discussion- ~10 hospitals in MD do cardiac surgery procedures	
O	Percent of patients undergoing isolated CABG who require a return to the operating room for bleeding/tamponade, graft occlusion, or other cardiac reason.	Society of Thoracic Surgeons	X	Potentially planned for future		X	WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
O	CABG -risk-adjusted operative mortality (30-day)	Society of Thoracic Surgeons	X	Potentially planned for future		X	WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM). 7/22/08- EWG discussion- concern voiced re. measures occuring post discharge.	
O	CABG- risk-adjusted inpatient mortality	AHRQ/ 3m	X	Potentially planned for future		X	Risk adjustment using the 3m APR-DRG methodology. CMS/Premier Demonstration uses this measure.	
O	Risk-Adjusted Operative Mortality for Aortic Valve Replacement (AVR)	Society of Thoracic Surgeons	X	Potentially planned for future			WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
O	Risk-Adjusted Operative Mortality for Mitral Valve Replacement/Repair (MVR)	Society of Thoracic Surgeons	X	Potentially planned for future			WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
O	Risk-Adjusted Operative Mortality MVR+CABG Surgery	Society of Thoracic Surgeons	X	Potentially planned for future			WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
O	Risk-Adjusted Operative Mortality for AVR+CABG	Society of Thoracic Surgeons	X	Potentially planned for future				
O	Percent of patients undergoing isolated CABG who developed deep sternal wound	Society of Thoracic	X	Potentially planned for		X	WellPoint/Anthem uses subset of 5 STS CABG	

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
	infection within 30 days post-operatively. **(NOTE: Also included in "Infection Prevention- Surgery" group)**	Surgeons		future			outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
O	Percent of patients undergoing isolated CABG (without pre-existing neurologic deficit) who develop a post-operative neurologic deficit persisting greater than 72 hours.	Society of Thoracic Surgeons	X	Potentially planned for future			WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
O	Prolonged Intubation (ventilation)-Percent of patients undergoing isolated CABG (without pre-existing intubation/tracheostomy) who require intubation for more than 24 hours.	Society of Thoracic Surgeons	X	Potentially planned for future		X	WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
P	CABG-Beta Blockade at Discharge	Society of Thoracic Surgeons	X	Potentially planned for future				
P	CABG- Anti-Lipid Treatment Discharge	Society of Thoracic Surgeons	X	Potentially planned for future				
P	CABG-Percentage of patients with documented pre-operative beta blockade who had a coronary artery bypass graft	Society of Thoracic Surgeons	X	Potentially planned for future				
P	CABG- using internal mammary artery	CMS	X	Potentially planned for future		X	CMS/Premier Demonstration uses this measure.	
P	Cardiac surgery patients with controlled 6a.m. serum glucose. (**NOTE: Also included in "Surgical Care Improvement-Infection Prevention" group.)**	CMS/ Joint Commission	X	Potentially planned for future				
	ASTHMA							
P	Use of relievers for inpatient asthma	Joint Commission	X	Planned for future	X		To be added to Hospital Compare July 2008 but not selected for payment.	
P	Use of systemic corticosteroids for inpatient asthma	Joint Commission	X	Planned for future	X		To be added to Hospital Compare July 2008 but not selected for payment.	
P	Home management plan of care given to pediatric asthma inpatient or caregiver at discharge	Joint Commission	X		X		To be added to Hospital Compare with date to be designated; not selected for payment.	
	HEALTHCARE ASSOCIATED INFECTION (INCLUDING PREVENTION)-GENERAL							
P	Healthcare worker flu vaccination	CDC		Fall 08 for			MHCC requires that all	

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				data collection			Maryland hospitals use the CDC's NHSN for data collection and reporting. NQF has endorsed safe practice supporting patient and healthcare worker influenza vaccination (see above in the table under "Structure".	
P	Percentage of intensive care patients with central lines for whom all elements of the central line bundle are documented and in place. The central line bundle elements include: •Hand hygiene , •Maximal barrier precautions upon insertion •Chlorhexidin	Institute for Healthcare Improve-ment	X					
P	Compliance with MRSA screening for ICU patients	CDC		Fall 08 for data collection			MHCC requires that all Maryland hospitals use the CDC's NHSN for data collection and reporting	
P	Percentage of intensive care unit patients on mechanical ventilation at time of survey for whom all elements of the ventilator bundle are documented and in place.	Joint Commission , Institute for Healthcare Improve-ment	X	Potentially planned for future				
O	Central line catheter-associated blood stream infection rate for ICU and high-risk nursery(HRN) patients	CDC	X	X		X	Data collection to start 7/1/08 using CDC NHSN data collection tools. CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	Urinary catheter-associated urinary tract infection	CDC	X			X	CMS to begin non-payment for this 'hospital acquired condition" in October 2008. 7/22/08- EWG discussion: this measure should remain on the table but be placed in the "parking lot"	
O	Ventilator-associated pneumonia for ICU and HRN patients	CDC	X					
	SURGICAL CARE IMPROVEMENT-INFECTION, INCLUDING PREVENTION							
P	Surgical infection prevention antibiotic given 1 hour prior to surgery	CMS/Joint Commission	X	X (hip, knee colon)	X	X	MHCC Hospital Guide expanding to all procedures 2008/2009. Measure in the initial QBR Initiative set, and	

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							CMS recommended hospital VBP set.	
P	Surgical infection prevention antibiotic selection	CMS/Joint Commission	X	X (hip, knee colon)	X	X	MHCC Hospital Guide expanding to all procedures 2008/2009. Measure in the initial QBR Initiative set. Measure NOT recommended by CMS for hospital VBP. CMS/Premier Demonstration uses this measure for hip, knee and CABG procedures.	
P	Surgical infection prevention antibiotic discontinuance	CMS/Joint Commission	X	X (hip, knee colon)	X	X	MHCC Hospital Guide expanding to all procedures 2008/2009. Measure in the initial QBR Initiative set, and CMS recommended hospital VBP set. CMS/Premier Demonstration uses this measure for hip, knee and CABG patients.	
P	Outpatient Surgery- Timing of antibiotic prophylaxis	CMS		Potentially planned for future	Potentiall y planned for future			
P	Outpatient Surgery- Selection of prophylactic antibiotic	CMS		Potentially planned for future	Potentiall y planned for future			
P	Percentage of surgery patients with surgical hair site removal with clippers or depilatory or no surgical site hair removal	CMS / Joint Commission	X		X	X	Proposed but not adopted in final rule for use in Medicare pay for reporting starting FFY 2009.	
O	Cardiac surgery patients with controlled 6a.m. serum glucose (**NOTE: Also included in "Cardiac Surgery" group.)**	CMS/ Joint Commission	X	Potentially planned for future				
O	Colorectal patients with immediate postoperative normothermia	CMS			X	X	Proposed but not adopted in final rule for use in Medicare pay for reporting starting FFY 2009	
O	Percent of patients undergoing isolated CABG who developed deep sternal wound infection within 30 days post-operatively. **(NOTE: Also included in "Cardiac Surgery" group)**	Society of Thoracic Surgeons	X	Potentially planned for future		X	WellPoint/Anthem uses subset of 5 STS CABG outcome measures in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
O	Surgical site infection rate	CDC, CMS	X	Planned for future		X	MHCC may begin reporting on Performance Guide 2009/ 2010. CMS to begin non-payment for patients with mediastinitis following	

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							CABG, a subset of this 'hospital acquired condition" measure, in October 2008.	
O	Surgical site infection following CABG	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	Surgical site infection following certain orthopedic procedures	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
	Surgical site infection following bariatric surgery for obesity	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
	SURGICAL CARE IMPROVEMENT-CARDIOVASCULAR COMPLICATON PREVENTION							
P	Percentage of surgery patients on beta blocker therapy prior to admission who received a beta blocker during the perioperative period	CMS/ Joint Commission	X		X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
	VENOUS THROMBOEMBOLISM (VTE) CARE AND PREVENTION							
P	Surgery Patients Who Received Appropriate Venous Thromboembolism (VTE) Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours After Surgery End Time	CMS	X	Planned 2009	X	X	Used in Medicare pay for reporting starting in 2007.	
P	Surgery Patients with Recommended Venous Thromboembolism (VTE) Prophylaxis Ordered	CMS	X	Planned 2009	X	X	Used in Medicare pay for reporting starting in 2007.	
P	The number of patients that receive VTE prophylaxis or have documentation why no VTE prophylaxis was given within 24 hours of hospital admission or surgery end time.	Joint Commission	X					
P	The number of patients that receive VTE prophylaxis or have documentation why no VTE prophylaxis was given within 24 hours after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end time.	Joint Commission	X					
P	VTE Patients with Overlap of Anticoagulation Therapy	Joint Commission	X					
P	The number of patients receiving intravenous (IV) UFH therapy with documentation that the dosages and platelet counts are monitored by protocol (or nomogram).	Joint Commission	X					
P	The number of VTE patients that are discharged home, home care, or home hospice on warfarin with written discharge	Joint Commission	X					

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	instructions that addresses all four criteria; Follow-up Monitoring, Compliance Issues, Dietary Restrictions, Potentia							
O	Deep vein thrombosis or pulmonary embolism following certain orthopedic procedures.	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	The number of patients that were diagnosed with VTE during hospitalization (not present at admission) that did not receive VTE prophylaxis.	Joint Commission	X					
	ACUTE MYOCARDIAL INFARCTION/ ACUTE CORONARY SYNDROME							
P	Acute myocardial infarction (AMI) patients receiving percutaneous coronary intervention (PCI) during the hospital stay with a time from hospital arrival to PCI of: • 90 minutes • 120 minutes	CMS/Maryland STEMI Registry	X	Planned for future	X	X	90 minute measure is used in Medicare pay for reporting starting in 2007. 120 minute measure is recommend by CMS to Congress in hospital VBP Program.	
P	Acute myocardial infarction (AMI) patients receiving fibrinolytic therapy during the hospital stay and having a time from hospital arrival to fibrinolysis of 30 minutes or less.	CMS	X	Planned for future	X	X	Used in Medicare pay for reporting starting in 2007.	
O	PCI mortality (risk-adjusted)	ACC/AHA Task Force on Performance Measures	X	Potentially planned for future				
	CANCER							
P	Post- breast conserving surgery irradiation	National Cancer Institute[6]	X				See measure specifications and other information in Appendix H.	
P	Adjuvant chemotherapy is considered or administered following breast cancer surgery	National Cancer Institute	X				See measure specifications and other information in Appendix H.	
P	Adjuvant hormonal therapy following breast cancer surgery	National Cancer Institute	X				See measure specifications and other information in Appendix H.	
S?	Use of College of American Pathologists Breast Cancer Protocol	National Cancer Institute	X				See measure specifications and other information in Appendix H.	
P	Adjuvant chemotherapy after colon cancer surgery	National Cancer Institute	X				See measure specifications and other information in Appendix H.	
P	Completeness of pathology reporting for colon cancer	National Cancer Institute	X				See measure specifications and other information in Appendix H.	

[6] See Appendix F for specifications and additional background information

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S?	Use of College of American Pathologists Colon Cancer Protocol	National Cancer Institute	X				See measure specifications and other information in Appendix H.	
	OBSTETRIC AND NEONATAL CARE							
O	Late sepsis or meningitis: a. low birth weight neonates, and b. very low birth weight neonates	Vermont Oxford Network[7], [8]	X					
O	Admission temperature at birth- low and very low birth weight neonates	Vermont Oxford Network					Currently under consideration for NQF endorsement	
P	Surfactant administration timing- low and very low birth weight neonates	Vermont Oxford Network					Currently under consideration for NQF endorsement	
O	Overall survivor rate without morbidity- low and very low birth weight neonates	Vermont Oxford Network/ Texas Childrens Hospital					This measure is a composite of the Vermont Oxford	
O	Inpatient neonatal mortality	Joint Commission		Potentially planned for future			7/22/08-EWG discussion: this is a sentinel, low volume event but may be important to hospitals providing specialty NICU services (level III.A. and above nurseries)	
O	Childbirth- third or fourth degree laceration	Joint Commission		Potentially planned for future			7/22/08- EWG discussion: Not all hospitals have maternal child services.	
	PEDIATRIC ICU CARE							
O	Periodic clinical review of unplanned readmissions to the PICU that occurred within 24 hours of discharge or transfer from the PICU.	National Association of Children's Hospitals and Related Institutions	X					
P	Percentage of PICU patients receiving: a. Pain assessment on admission, b. Periodic pain assessment.	National Association of Children's Hospitals and Related Institutions	X					
	E**MERGENCY DEPARTMENT- AMI/ACUTE CORONARY SYNDROME**							

[7] Nationally, approximately 70% of neonatologists participate in the Vermont Oxford database and are already collecting the Vermont Oxford Network measure data elements.

[8] 7/22/08- EWG informed additional information will be provided regarding risk adjustment approach and other measures.

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P	Emergency Department[9]-acute myocardial infarction (AMI) patients or chest pain patients (with Probable Cardiac Chest Pain) without aspirin contraindications who received aspirin within 24 hours before ED arrival or prior to transfer.	CMS	X	Potentially planned for future	Potentially planned for future			
P	Median time from emergency department arrival to administration of fibrinolytic therapy in ED patients with ST-segment elevation or left bundle branch block (LBBB) on the electrocardiogram (ECG) performed closest to ED arrival and prior to transfer.	CMS	X	Potentially planned for future	Potentially planned for future			
P	Emergency Department acute myocardial infarction (AMI) patients receiving fibrinolytic therapy during the ED stay and having a time from ED arrival to fibrinolysis of 30 minutes or less.	CMS	X	Potentially planned for future	Potentially planned for future			
P	Median time from emergency department arrival to ECG (performed in the ED prior to transfer) for acute myocardial infarction (AMI) or Chest Pain patients (with probable cardiac chest pain).	CMS	X	Potentially planned for future	Potentially planned for future			
P	Median time from emergency department arrival to time of transfer to another facility for acute coronary intervention	CMS	X	Potentially planned for future	Potentially planned for future			
	EMERGENCY DEPARTMENT-INFORMATION TRANSFER							
P	ED- Percentage of patients transferred to another acute hospitals whose medical record documentation indicated that **administrative information** was communicated to the receiving hospital within 60 minutes of departure	University of Minnesota Rural Health Research Center	X					
P	ED- Percentage of patients transferred to another acute hospitals whose medical record documentation indicated that the entire **vital signs** record was communicated to the receiving hospital within 60 minutes of departure	University of Minnesota Rural Health Research Center	X					
P	ED- Percentage of patients transferred to another acute hospitals whose medical	University of Minnesota	X					

[9] In early 2008, the Maryland Health Care Commission prepared a report, *Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Crowding*, at the request of the Maryland General Assembly. Two of recommendations included in this report address the need to strengthen the data available to assist in understanding the underlying reasons for ED crowding. To study and recommend standardized measures of ED utilization and patient flow, the Commission has established an Emergency Department Performance Measures Technical Advisory Committee.

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	record documentation indicated that **medication information** was communicated to the receiving hospital within 60 minutes of departure	Rural Health Research Center						
P	ED- Percentage of patients transferred to another acute hospitals whose medical record documentation indicated that **patient information** was communicated to the receiving hospital within 60 minutes of departure	University of Minnesota Rural Health Research Center	X					
P	ED- Percentage of patients transferred to another acute hospitals whose medical record documentation indicated that **physician information** was communicated to the receiving hospital within 60 minutes of departure	University of Minnesota Rural Health Research Center	X					
P	ED- Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that **nursing information** was communicated to the receiving hospital within 60 minutes of departure	University of Minnesota Rural Health Research Center	X					
P	ED- Percentage of patients transferred to another acute care hospital whose medical record documentation indicated that **procedure and test information** was communicated to the receiving hospital within 60 minutes of departure	University of Minnesota Rural Health Research Center	X					
	EMERGENCY DEPARTMENT-TIMING							
P	Patient Left Before Seen	OK Foundation for Medical Quality		Potentially planned for future				
P	Admit Decision Time to ED Departure Time for Admitted Patients	OK Foundation for Medical Quality		Potentially planned for future				
P	Time from ED Arrival to ED Departure for Discharged ED Patients	OK Foundation for Medical Quality		Potentially planned for future				
P	Median Time to Pain Management for Long Bone Fracture	OK Foundation for Medical Quality		Potentially planned for future				
P	Median time from initial chest x-ray order to time chest x-ray exam is completed.	OK Foundation for Medical Quality		Potentially planned for future				

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
P	Median Time from Head CT Scan Order to Head CT Scan Interpretation	OK Foundation for Medical Quality		Potentially planned for future				
P	Median time from initial complete blood count (CBC) order to time CBC results are reported to emergency department staff.	OK Foundation for Medical Quality		Potentially planned for future				
P	Median time from initial electrolyte or basic metabolic profile (BMP) order to time electrolyte results or BMP are reported to emergency department staff.	OK Foundation for Medical Quality		Potentially planned for future				
P	Median time from initial troponin order to time troponin results are reported to emergency department staff.	OK Foundation for Medical Quality		Potentially planned for future				
	EMERGENCY DEPARTMENT- ECG PERFORMED							
P	ECG Performed for Syncope	OK Foundation for Medical Quality		Potentially planned for future				
P	ECG Performed for Non-Traumatic Chest Pain	OK Foundation for Medical Quality		Potentially planned for future				
	READMISSION							
O	Potentially preventable readmission rate	3m					This measure uses the 3m APR-DRG which all Maryland hospitals also use, is risk adjusted, and uses administrative data to calculate.	
O	30-day readmission rates on top 33 DRGs	MHCC		X				
O	Heart failure 30-day risk standardized re-admission (Medicare only)	CMS					**Selected for use in Medicare pay for reporting starting FFY 2009.**	
	MORTALITY							
O	Mortality for selected medical conditions (composite)	AHRQ			X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
O	Mortality for selected surgical procedures (composite)	AHRQ			X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
O	AMI 30-day mortality, all payer	MHCC?		Planned for future				
O	CHF 30-day mortality, all payer	MHCC?		Planned for				

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
				future				
O	Inpatient Pneumonia Mortality	AHRQ	X					
O	Pediatric Heart Surgery Mortality (PDI 6)	AHRQ	X					
	Pediatric Heart Surgery Volume (PDI 7) (paired with mortality)	AHRQ	X					
O	Death in Low Mortality DRGs (PSI 2)	AHRQ	X			X	Low volume. Anthem BC uses in pay for reporting, not pay for performance (actual rate)	
	Abdominal Aortic Aneurysm Volume (AAA) (IQI 4)- paired with mortality measure	AHRQ	X				Risk adjusted using AHRQ covariate methodology.	
O	Abdominal Aortic Artery (AAA) Repair Mortality Rate (IQI 11)	AHRQ	X				Risk adjusted using AHRQ covariate methodology. **Selected for use in Medicare pay for reporting starting FFY 2009.**	
	Congestive Heart Failure Mortality (IQI 16)	AHRQ	X				Risk adjusted using AHRQ covariate methodology.	
O	Esophageal Resection Mortality Rate (IQI 8)	AHRQ	X				Risk adjusted using AHRQ covariate methodology. Very low volume and small cell sizes.	
	Esophageal Resection Volume (IQI 1) (paired with mortality)	AHRQ	X				Risk adjusted using AHRQ covariate methodology. Very low volume and small cell sizes.	
O	Pancreatic Resection Mortality Rate (IQI 9)	AHRQ	X				Risk adjusted using AHRQ covariate methodology.	
	Pancreatic Resection Volume (IQI 2) (paired with mortality)	AHRQ	X				Risk adjusted using AHRQ covariate methodology.	
O	Death among surgical inpatients with treatable serious complications (Failure to rescue)	AHRQ	X		X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
O	Congestive Heart Failure Mortality (IQI 16)	AHRQ	X				Risk adjusted using AHRQ covariate methodology.	
O	Hip fracture mortality rate	AHRQ	X		X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
	MORTALITY- PREVENTION							
S	Implementation of rapid response teams	Institute for Healthcare Improve-ment				X	WellPoint/Anthem uses this measure in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	
	ADVERSE EVENTS/COMPLICATIONS							
O	Potentially preventable complication rate	3m					This measure uses the 3m APR-DRG which all Maryland hospitals also use,	

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
							is risk adjusted, and uses administrative data to calculate. Dependent on POA variable.	
O	Complications/ patient safety for selected indicators	AHRQ			X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
O	Decubitus Ulcer- children (PDI 2)	AHRQ	X					
O	Stage III and IV pressure ulcers	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	Pressure ulcer prevalence and incidence by severity	Joint Commissoin					Proposed but not adopted in final rule for use in CMS pay for reporting beginning FFY 2010.	
O	Pressure ulcer prevalence	California Nursing Outcome Coalition	X					
O	Falls and trauma, including: fractures, dislocations , head injuries, crushing Injuries, burns, electric shock	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	Falls with injury	American Nurses Association	X		X proposed	X	Proposed but not adopted in final rule for use in CMS pay for reporting beginning FFY 2010. This measure is used for ANA Magnet Hospital designation	
O	Air embolism	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	Blood incompatibility	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	Transfusion Reaction (PSI 16)	AHRQ	X					
O	Foreign Body Left in During Procedure- adult (PSI 5)	AHRQ	X				Rare event.	
O	Foreign object retained after surgery	CMS					CMS to begin non-payment for this 'hospital acquired condition" in October 2008.	
O	Foreign Body left after procedure- pediatric (PDI 3)	AHRQ	X				Risk adjusted using AHRQ covariate methodology.	
O	Accidental Puncture or Laceration- pediatric (PDI 1)	AHRQ	X					
O	Accidental Puncture or Laceration- adult (PSI 15)	AHRQ	X		X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
O	Iatrogenic Pneumothorax (adults) (PSI 6)	AHRQ	X		X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
O	Complications of anesthesia (PSI 1)					X	Low volume. Anthem BC uses in pay for reporting, not pay for performance (actual rate)	
O	Iatrogenic Pneumothorax in children (Non-Neonates) (PDI 5)	AHRQ	X					
O	Post operative Wound Dehiscence- pediatric (PDI 11)	AHRQ	X					
O	Post operative Wound Dehiscence- adult (PSI 14)	AHRQ	X		X	X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
O	Post operative hemorrhage or hematoma	AHRQ				X	Risk adjustment is done using the AHRQ methodology. CMS/Premier Demonstration uses this measure for hip, knee and CABG patients.	
O	Post operative physiologic and metabolic derangement	AHRQ				X	Risk adjustment is done using the AHRQ methodology. CMS/Premier Demonstration uses this measure for hip, knee and CABG patients.	
O	Complications/patient safety for selected indicators (composite)	AHRQ				X	**Selected for use in Medicare pay for reporting starting FFY 2009.**	
	UTILIZATION							
O	Percent of surgical and medical discharges under 18 years with ICD-9-CM code for decubitus ulcer in secondary diagnosis field.	Agency for Healthcare Research and Quality	X					
O	Surgical Volume - a. Isolated Coronary Artery Bypass Graft (CABG) Surgery, b. Valve Surgery, c. CABG+Valve Surgery	CMS	X				7/11/08- Some EWG members voiced concerns about use of volume measures.	
O	Incidental Appendectomy in the Elderly Rate (IQI 24)	AHRQ	X				Should be risk adjusted using APR-DRG, age and sex.	
O	Percent of discharges with heart catheterizations in any procedure field with simultaneous right and left heart (bilateral) heart catheterizations.	AHRQ	X					
	PATIENT EXPERIENCE							

Categories/ Conditions and Measures[3] *S=Structural Measure* *P=Process Measure* *O=Outcome Measure* *E=Patient Experience Measure*		Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	EWG Member Rank/ Code 1,2,3,4 or 5
E	Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)- 27 questions, with 18 substantive on 10 domains of care	AHRQ	X	Planned for future.	X	X	Used in Medicare pay for reporting starting in 2007. CMS recommended to Congress use of this measure in hospital VBP.	
E	3-Item Care Transition Measure (CTM-3)- patients indicate on a scale whether they agree or disagree with the following: • The hospital staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left the hospital. • When I left the hospital, I had a good understanding of the things I was responsible for in managing my health. • When I left the hospital, I clearly understood the purpose for taking each of my medications.	Univ of Colorado at Denver & Health Sciences Center	X					

Figure 4 below contains those measures removed from the table containing candidate measures that should be considered for the QBR Initiative.

Figure 4. Measures Determined not a Priority by the Evaluation Work Group

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
STRUCTURE[10]							
Create and sustain a healthcare culture of safety. Practice Element 1: Leadership structures and systems must be established to ensure that there is organization-wide awareness of patient safety performance gaps, that there is direct accountability of leaders for those gaps, that an adequate investment is made in performance improvement abilities, and that actions are taken to assure the safe care of	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard

[10] Maryland Health Care Commission plans to add Safety Practices to the online Hospital Performance Evaluation Guide in 2008 and 2009.

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
every patient served. Practice Element 2: Healthcare organizations must measure their culture, provide feedback to the leadership and staff, and undertake interventions that will reduce patient safety risk Practice Element 3: Healthcare organizations must establish a proactive, systematic, and organization-wide approach to developing team-based care through teamwork training, skill building, and team led performance improvement interventions that reduce preventable harm to patients. Practice Element 4: Healthcare organizations must systematically identify and mitigate patient safety risks and hazards with an integrated approach in order to continuously drive down preventable patient harm.							
Ask each patient or legal surrogate to "teach back" in his or her own words key information about the proposed treatments or procedures for which he or she is being asked to provide informed consent.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Ensure that written documentation of the patient's preferences for life-sustaining treatments is prominently displayed in his or her chart.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Following serious unanticipated outcomes, including those that are clearly caused by systems failures, the patient and, as appropriate, the family should receive timely, transparent, and clear communication concerning what is known about the event.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Implement critical components of a well-designed nursing workforce that mutually reinforce patient safeguards, including the following: • a nurse staffing plan with evidence that it is adequately resourced and actively	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily	7/11/08-EWG discussion: Joint Commission Standard

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
managed and that its effectiveness is regularly evaluated with respect to patient safety; • senior administrative nursing leaders, such as a chief nursing officer, as part of the hospital senior management team; • governance boards and senior administrative leaders that take accountability for reducing patient safety risks related to nurse staffing decisions and the provision of financial resources for nursing services; and • the provision of budget resources to support nursing staff in the ongoing acquisition and maintenance of professional knowledge and skills.						participate in at least a portion of the survey.	
Ensure that non-nursing, direct care staffing levels are adequate, that the staff is competent, and that they have had adequate orientation, training, and education to perform their assigned direct care duties.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Ensure that care information is transmitted and appropriately documented in a timely manner and in a clearly understandable form to patients and to all of the patient's healthcare providers/ professionals, within and between care settings, who need that information in order to provide continued care.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
For verbal or telephone orders or for telephonic reporting of critical test results, verify the complete order or test result by having the person who is receiving the information record and read back the complete order or test result.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Implement standardized policies, processes, and systems to ensure the accurate labeling of radiographs, laboratory specimens, or other diagnostic studies so that the right study is labeled for theright patient at the right time.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
A "discharge plan" must be prepared for each patient at the time of hospital discharge, and a concise discharge summary must be prepared for and relayed to the clinical caregiver accepting responsibility for postdischarge care in a timely manner.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Standardize a list of "do not use" abbreviations, acronyms, symbols, and dose designations that cannot be used throughout the organization.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
The healthcare organization must develop, reconcile, and communicate an accurate medication list throughout the continuum of care.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Pharmacists should actively participate in medication management systems by, at a minimum, working with other health professionals to select and maintain a formulary of medications chosen for safety and effectiveness, being available for consultation with prescribers on medication ordering, interpretation and review of medication orders, preparation of medications, assurance of the safe storage and availability of medications, dispensing of medications, and administration and monitoring of medications.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Standardize methods for the labeling and packaging of medications.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Identify all high alert drugs, and establish policies and processes to minimize the risks associated with the use of these drugs. At a minimum, such drugs should include intravenous adrenergic agonists and	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland	7/11/08-EWG discussion: Joint Commission

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
antagonists, chemotherapy agents, anticoagulants and anti-thrombotics, concentrated parenteral electrolytes, general anesthetics, neuromuscular blockers, insulin and oral hypoglycemics, and opiates.						hospitals voluntarily participate in at least a portion of the survey.	Standard
Healthcare organizations should dispense medications, including parenterals, in unit-dose, or, when appropriate, in unit-of-use form, whenever possible.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Action should be taken to prevent ventilator-associated pneumonia by implementing ventilator bundle intervention practices.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Defer to process or outcome measure(s)
Adhere to effective methods of preventing central venous catheter-associated bloodstream infections, and specify the requirements in explicit policies and procedures.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Defer to process or outcome measure(s)
Prevent surgical site infections (SSIs) by implementing four components of care: • appropriate use of antibiotics; • appropriate hair removal; • maintenance of postoperative glucose control for patients undergoing major cardiac surgery; and • establishment of postoperative normothermia for patients undergoing colorectal surgery.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Defer to process or outcome measure(s)
Comply with current Centers for Disease Control and Prevention (CDC) Hand Hygiene guidelines.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission /WHO Standard

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
Annually, immunize healthcare workers and patients who should be immunized against influenza.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard Defer to process or outcome measure(s)
Implement the Universal Protocol for Preventing Wrong Site,Wrong Procedure,Wrong Person Surgery for all invasive procedures.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Evaluate each patient undergoing elective surgery for his or her risk of an acute ischemic perioperative cardiac event, and consider prophylactic treatment with beta blockers for patients who either: 1. have required beta blockers to control symptoms of angina or have symptomatic arrhythmias or hypertension, or 2. are at high cardiac risk owing to the finding of ischemia on preoperative testing and are undergoing vascular surgery.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Defer to process or outcome measure(s)
Evaluate each patient upon admission, and regularly thereafter, for the risk of developing pressure ulcers. This evaluation should be repeated at regular intervals during care. Clinically appropriate preventive methods should be implemented consequent to this evaluation.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Defer to process or outcome measure(s)
Evaluate each patient upon admission, and regularly thereafter, for the risk of developing venous thrombo-embolism/deep vein thrombosis (VTE/DVT). Utilize clinically appropriate, evidence-based methods of thrombo-prophylaxis.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Defer to process or outcome measure(s)

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
Every patient on long-term oral anticoagulants should be monitored by a qualified health professional using a careful strategy to ensure the appropriate intensity of supervision.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Defer to process or outcome measure(s)
Utilize validated protocols to evaluate patients who are at risk for contrast media-induced renal failure, and utilize a clinically appropriate method for reducing the risk of renal injury based on the patient's kidney function evaluation.	National Quality Forum	X			X	This practice is one on which hospitals may voluntarily report as part of the Leapfrog Hospital Survey; currently 8 Maryland hospitals voluntarily participate in at least a portion of the survey.	7/11/08-EWG discussion: Joint Commission Standard
Skill mix (RN, LPN, unlicensed assistive personnel (UAP), and contract)	American Nurses Assoc (ANA)	X				This measure is used for ANA Magnet Hospital designation	7/11/08-EWG discussion: Not Risk-Adjusted
Nursing care hours per patient day (RN, LPN, and UAP)	VHA, Inc	X				This measure is used for ANA Magnet Hospital designation	7/11/08-EWG discussion: Not Risk-Adjusted
Practice Environment Scale - Nursing Work Index (composite and five subscales)	Public Domain.	X				This measure is used for ANA Magnet Hospital designation	7/11/08-EWG discussion: Not Risk-Adjusted
Number of voluntary uncontrolled separations during the month for RNs, advanced practice nurses, LPNs, and nurse assistants/aides	CMS	X					7/11/08-EWG discussion: Not Risk-Adjusted
Participation in a Systematic Database for Cardiac Surgery	Society of Thoracic Surgeons	X		Potentiall y planned for future	X	WellPoint/Anthem uses this measure in their Quality-in-Sights Hospital Incentive Program (Q-HIPSM).	7/11/08-EWG discussion: Defer to process or outcome measure(s)
Vaginal birth after Cesarean Section	Joint Commissio n	X					7/22/08-EWG discussion: Does not indicate quality of care.

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
The number of days between PICU admission and PICU discharge for PICU patients.	National Association of Children's Hospitals and Related Institutions	X					7/22/08- EWG discussion: Low volume.
The total number of patients requiring unscheduled readmission to the ICU within 24 hours of discharge or transfer.	National Association of Children's Hospitals and Related Institutions						7/22/08- EWG discussion: Low volume
Falls prevalence	American Nurses Assoc	X		X proposed	X	Proposed for use in CMS pay for reporting beginning FFY 2010. 7/22/08- EWG discussion	"Falls" definition too broad. Defer to falls with injury measure.
Restraint prevalence (vest and limb only)	California Nursing Outcome Coalition	X				This measure is used for ANA Magnet Hospital designation	
Proportion admitted to the ICU in the last 30 days of life	National Cancer Institute	X					Confounding factors
Proportion dying in an acute care setting	National Cancer Institute	X					Confounding factors
Risk-adjusted standardized mortality ratio for dialysis facility patients.	CMS					Reported on Dialysis Facility Compare	
AMI 30 day mortality, Medicare only	CMS	X			X	Used in Medicare pay for reporting starting 2007. CMS recommended to Congress use of this measure in hospital VBP.	Prefer all payer
CHF 30 day mortality, Medicare only	CMS	X			X	Used in Medicare pay for reporting starting 2007. CMS recommended to Congress use of this measure in hospital VBP.	Prefer all payer
AMI 30 day mortality, Medicare only	CMS	X			X	Used in Medicare pay for reporting starting 2007. CMS recommended to	Prefer all payer

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
						Congress use of this measure in hospital VBP.	
CHF 30 day mortality, Medicare only	CMS	X			X	Used in Medicare pay for reporting starting 2007. CMS recommended to Congress use of this measure in hospital VBP.	Prefer all payer
Pneumonia 30-day mortality, Medicare only	CMS	X			X	To be used in Medicare pay for reporting starting 2008.	Prefer all payer
Hip and knee 30 day readmission rate for Medicare patients	CMS/Premier				X	Risk adjustment using the 3m APR-DRG methodology. CMS/Premier Demonstration uses this measure.	Prefer all payer
Pneumonia 30-day risk standardized readmission rate- Medicare only	CMS			X proposed	X	Proposed for use in CMS pay for reporting beginning FFY 2010.	Prefer all payer
Heart attack 30-day risk standardized readmission rate- Medicare only	CMS			X proposed	X	Proposed for use in CMS pay for reporting beginning FFY 2010.	Prefer all payer
Heart failure 30-day risk standardized readmission rate- Medicare only				X proposed	X	Proposed for use in CMS pay for reporting beginning FFY 2010.	Prefer all payer
Overall inpatient hospital average length of stay (ALOS) and ALOS by medical service category.	PacifiCare	X					Not determined to be a measure of quality.
Overall inpatient 30-day hospital readmission rate.	PacifiCare	X					Not determined to be a measure of quality.
PICU Standardized Mortality Ratio	National Association of Children's Hospitals and Related Institutions	X					Very low volume.
Failure to Rescue In-Hospital Mortality	Children's Hospital of Philadelphia	X					Very low volume.
Failure to Rescue 30-Day Mortality	Children's Hospital of Philadelphi	X					Very low volume.

Categories, Conditions and Measures	Owner/ Source	NQF-Endors-ed	MD Hospital Perform-ance Guide	Hospital Compare	Used In P-4-P/ Repor-ting	Additional Notes	Rationale for Exclusion
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Appendix A: Agency for Healthcare Research and Quality Definitions of Quality Domains[11]

What is a Quality Measure?

In order to define a *quality measure*, it is important to define quality of care. NQMC relies on the Institute of Medicine's (IOMs) definition of quality of care as "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." A quality measure is a mechanism that enables the user to quantify the quality of a selected aspect of care by comparing it to a criterion. A subtype of a quality measure is a clinical performance measure. Specifically, a clinical performance measure is a mechanism for assessing the degree to which a provider competently and safely delivers clinical services that are appropriate for the patient in the optimal time period.

Each domain of measurement in NQMC (i.e., Access, Outcome, Patient Experience, Process, and Structure) offers a different insight into health care quality. Provided below are descriptions of the different types of information that are captured by each domain of measurement.

Access - an access measure assesses the patient's attainment of timely and appropriate health care. Barriers to access may include inability to pay for health care, difficulty traveling to health care facilities, unavailability of health care facilities, lack of a "medical home," cultural and health beliefs that prevent recognition of the need for and benefits of health care, and disparities in responding to persons seeking health care.

Outcome - an outcome of care is a health state of a patient resulting from health care. An outcome measure can be used to assess quality of care to the extent that health care services influence the likelihood of desired health outcomes. Outcome-based measures of quality reflect the cumulative impact of multiple processes of care. Outcome measures may suggest specific areas of care that may require quality improvement, but further investigation is typically necessary to determine the specific structures or processes that should be changed.

Patient Experience - a patient experience measure aggregates reports of patients about their observations of and participation in health care. These measures provide the patient perspective on quality of care.

Process - a process measure assesses a health care service provided to, or on behalf of, a patient. Process measures are often used to assess adherence to recommendations for clinical practice based on evidence or consensus. To a greater extent than outcome measures, process measures can identify specific areas of care that may require improvement.

Structure - a structure measure is a feature of a health care organization or clinician relevant to its capacity to provide health care. Structure data describe the capability of organizations or professionals rather than care provided to, or results achieved for, specific patients or groups of patients. For example, nurse/patient ratio is a structure-based measure because it does not describe care given to specific patients or specific groups of patients.

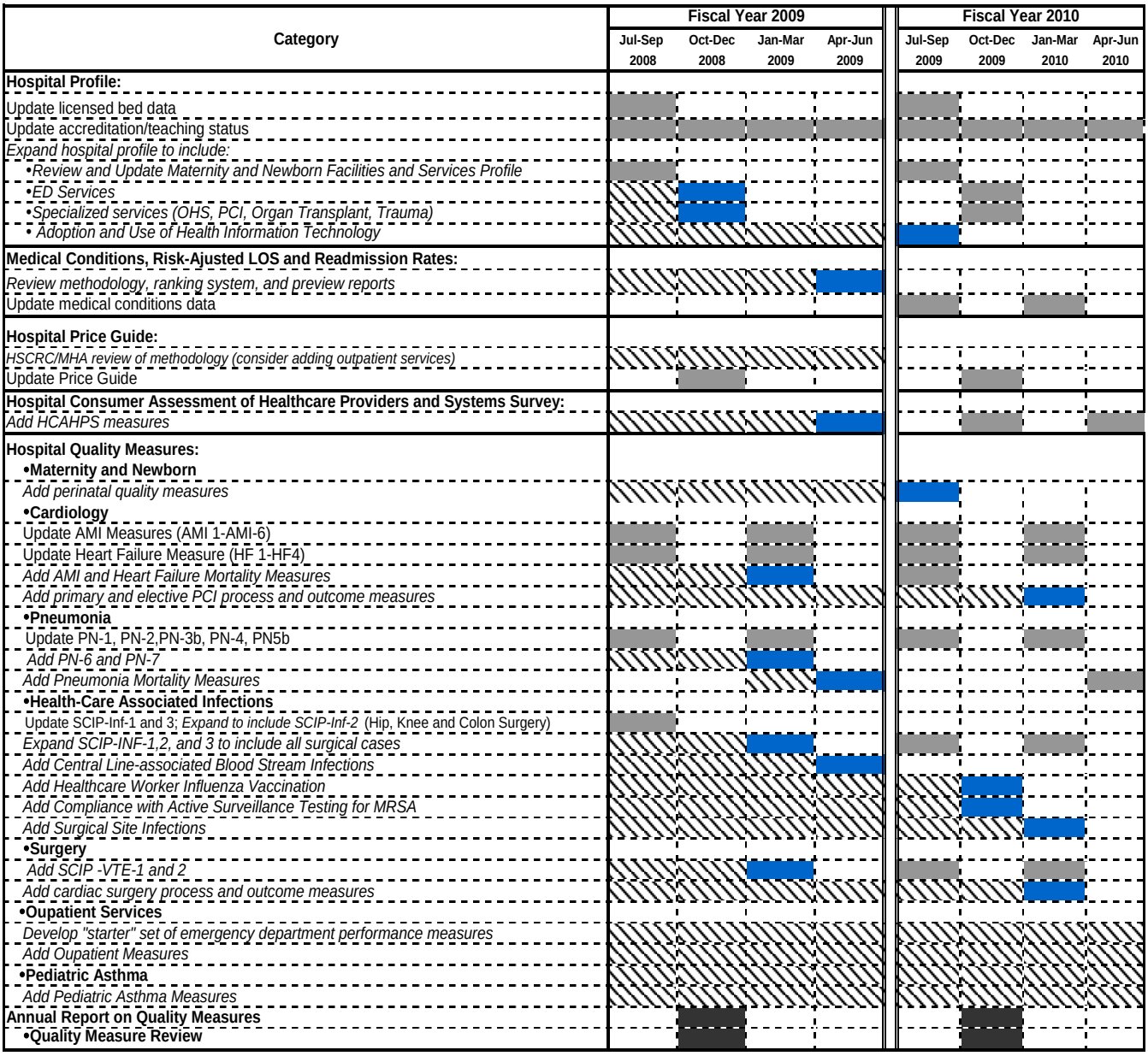
[11] Available at: http://www.qualitymeasures.ahrq.gov/resources/measure_use.aspx. Last accessed 7/24/08.

Appendix B: Comparison of Maryland QBR Initiative Measures and Measures Recommended for CMS Hospital Value-Based Purchasing

Measure Name	Maryland Hospital QBR Initiative	Recommended for CMS Hospital VBP
AMI-1- Aspirin at arrival	X	X
AMI-2- Aspirin prescribed at discharge	X	X
AMI-3- ACE inhibitor (ACE-I) or Angiotensin receptor blocker (ARB) for left ventricular systolic dysfunction	X	X
AMI-4- Adult smoking cessation advice/counseling	X	X
AMI-5- Beta blocker prescribed at discharge	X	X
AMI-6- Beta blocker at arrival	X	
AMI-7a- Fibronolytic agent received within 30 minutes of hospital arrival		X
AMI-8a- Primary percutaneous coronary intervention (PCI) received within 120 minutes of hospital arrival		X
Pneumonia-2- Pneumococcal vaccination	X	X
Pneumonia- 3a- Blood cultures performed within 24 hrs prior or 24 hrs after hospital arrival for patients admitted to ICU	X	
Pneumonia-3b- Blood cultures performed before first antibiotic	X	X
Pneumonia-4- Adult smoking cessation/advice	X	X
Pneumonia -5b- Patients receive their first dose of antibiotics within 4 hours after arrival to the hospital	X	
Pneumonia 6- Appropriate antibiotic selection		X
Pneumonia-7- Influenza vaccination	X	X
HF-1- Discharge instructions	X	X
HF-2- Left ventricular systolic function assessment	X	
HF-3- ACE inhibitor (ACE-I) or Angiotensin receptor blocker (ARB) for left ventricular systolic dysfunction	X	X
HF-4- Adult smoking cessation advice /counseling	X	X
SIP-1- Prophylactic antibiotic received within 1 hour prior to incision	X	X
SCIP-2- Prophylactic antibiotic selection for surgical patients	X	
SCIP-3- Prophylactic antibiotic discontinued within 24 hrs post surgery (48 hours for CABG procedures)	X	X
AMI- 30-day mortality measures (Medicare only)		X
HF- 30-day mortality measures (Medicare only)		X
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)		X

Appendix C: Future Implementation Timeline and Future Proposed Measures for the Maryland Hospital Performance Evaluation Guide

Table 1
Maryland Hospital Performance Evaluation Guide
Phasing of Updates and New Data, Fiscal Years 2009-2010



Draft 06/23/08
For Review and Discussion by the HPEG Advisory Committee

Table 2: Maryland Hospital Performance Evaluation System: Quality Measures Currently Reported and Planned for Implementation

Quality Measure Domain	Description	Measures Currently Reported	2009	2010
Acute Myocardial Infarction (AMI)	Aspirin at arrival (AMI-1)	✓	✓	✓
	Aspirin prescribed at discharge (AMI-2)	✓	✓	✓
	ACE inhibitor (ACE-I) or Angiotensin Receptor Blocker (ARBs) for left ventricular systolic dysfunction (AMI-3)	✓	✓	✓
	Adult smoking cessation advice/counseling (AMI-4)	✓	✓	✓
	Beta blocker prescribed at discharge AMI-5)	✓	✓	✓
	Beta blocker at arrival (AMI-6)	✓	✓	✓
	30-day AMI mortality		✓	✓
Hear Failure (HF)	Discharge instructions (HF-1)	✓	✓	✓
	Left ventricular function assessment (HF-2)	✓	✓	✓
	ACE inhibitor (ACE-I) or Angiotensin Receptor Blocker (ARBs) for left ventricular systolic dysfunction (HF-3)	✓	✓	✓
	Adult smoking cessation advice/counseling (HF-4)	✓	✓	✓
	30-day HF mortality		✓	✓
Pneumonia (PN)	Oxygenation assessment (PN-1)	✓	✓	✓
	Pneumococcal vaccination status (PN-2)	✓	✓	✓
	Blood culture performed in emergency department before first antibiotic received in hospital (PN-3b)	✓	✓	✓
	Adult smoking cessation advice/counseling (PN-4)	✓	✓	✓
	Initial antibiotic received within 4 hours of hospital arrival (PN-5b)	✓	✓	✓
	Appropriate initial antibiotic selection (PN-6)		✓	✓
	Influenza vaccination status (PN-7)		✓	✓
	30-day Pneumonia mortality		✓	✓
Surgical Care Improvement Project (SCIP)	Prophylactic antibiotic received within 1 hour prior to surgical incision (knee, hip, colon surgeries only) (SCIP-Inf-1)	✓	*Expand to all surgery*	✓
	Prophylactic antibiotic selection for surgical patients (SCIP-Inf-2)	✓	*Expand to all surgery*	✓
	Prophylactic antibiotics discontinued within 24 hours after surgery end time (knee, hip, colon surgeries only) (SCIP-Inf-3)	✓	*Expand to all surgery*	✓
	Cardiac Surgery w/controlled 6a.m. postoperative serum		✓	✓

Quality Measure Domain	Description	Measures Currently Reported	2009	2010
	glucose (SCIP-Inf-4)			
	Surgery patients w/appropriate hair removal (SCIP-Inf-6)		✓	✓
	Surgery patients with recommended venous thromboembolism prophylaxis ordered (SCIP-VTE-1)		✓	✓
	Surgery patients with recommended venous thromboembolism prophylaxis received within 24 hours prior to or after surgery (SCIP-VTE-2)		✓	✓
Healthcare-Associated Infections (HAI)	Central Line-Associated Blood Stream Infections		✓	✓
	Healthcare Worker Influenza Vaccination		✓	✓
	Compliance with Active Surveillance Testing for MRSA		✓	✓
	Selected Surgical Site Infections		✓	✓
	Ventilator-Associated Pneumonia Bundle Compliance			✓
Hospital Outpatient Services	ED Performance Measures			✓
	AMI (OP-1,2 and 3)			✓
	Chest Pain (OP-4,5)			✓
	Surgery (OP-6, 7)			✓
Maternity Care	VBAC (PR-1)			✓
	Inpatient Neonatal Mortality (PR-2)			✓
	Third or Fourth Degree Laceration (PR-3)			✓
Pediatric Asthma Care	Use of Relievers for Inpatient Asthma Care			✓
	Use of Systemic Corticosteriods for Inpatient Asthma Care			✓

APPENDIX D

CMS FFY 2009 Measures Adopted for Hospital Reporting for 2010 Annual Payment Update ("Pay for Reporting")

- SCIP Cardiovascular 2, surgery patients on a beta blocker prior to arrival who received a beta blocker during the peri-operative period
- Heart failure (HF) 30-day risk standardized re-admission measure (Medicare patients)

Nursing Sensitive Measure

- Failure to rescue (Medicare patients) (Nursing

AHRQ Patient Safety Indicators (PSIs)

- Death among surgical patients with treatable serious complications
- Iatrogenic pneumothorax, adult
- Postoperative wound dehiscence
- Accidental puncture or laceration

AHRQ Inpatient Quality Indicator Measures

- Abdominal aortic aneurysm (AAA) mortality rate (with or without volume)
- Hip fracture mortality rate
- Mortality for selected medical conditions (composite)
- Mortality for selected surgical procedures (composite)
- Complication/patient safety for selected indicators (composite)

- Participation in a systematic database for cardiac surgery

CMS Hospital Acquired Conditions (HAC) Adopted for FFY 2009 Implementation

- Foreign object (such as a sponge or needle) inadvertently left in patients after surgery
- Air embolism - an air bubble that enters the blood stream and can obstruct the flow of blood to the brain and vital organs
- Transfusion with the wrong type of blood
- Severe pressure ulcers – deterioration of the skin, due to the patient staying in one position too long, that has progressed to the point that tissue under the skin is affected (Stage III), or that has become so deep that there is damage to the muscle and bone, and sometimes tendons and joints (Stage IV)
- Falls and trauma:
  - Fracture
  - Joint dislocation
  - Head injury
  - Crushing injury
  - Burn
  - Electric shock
- Catheter-associated urinary tract infection (UTI)
- Vascular catheter-associated infection
- Manifestations of poor control of blood sugar levels
- Surgical site infection following coronary artery bypass graft (CABG)
- Surgical site infection following certain orthopedic procedures
- Surgical site infection following bariatric surgery for obesity
- Deep vein thrombosis (a blood clot in a major vein) and pulmonary embolism (blockage in the lungs) following certain orthopedic procedures

Appendix E: Proposed Measures for the CMS Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) "Pay for Reporting" Initiative 2011 and Subsequent Years

POSSIBLE MEASURES AND MEASURE SETS FOR THE RHQDAPU PROGRAM FOR FY 2011 AND SUBSEQUENT YEARS

Topic	Quality measure
Chronic Pulmonary Obstructive Disease Measures: Complications of Vascular Surgery	AAA stratified by open and endovascular methods. Carotid Endarterectomy. Lower extremity bypass.
Inpatient Diabetes Care Measures: Healthcare Associated Infection	Central Line-Associated Blood Stream Infections.
Timeliness of Emergency Care Measures, including Timeliness	Surgical Site Infections. Median Time from ED Arrival to ED Departure for Admitted ED Patients. Median Time from ED Arrival to ED Departure for Discharged ED Patients. Admit Decision Time to ED Departure Time for Admitted Patients.
Surgical Care Improvement Project (SCIP)—named SIP for discharges prior to July 2006 (3Q06).	SCIP Infection 8—Short Half-life Prophylactic Administered Preoperatively Redosed Within 4 Hours After Preoperative Dose. SCIP Cardiovascular 3—Surgery Patients on a Beta Blocker Prior to Arrival Receiving a Beta Blocker on Postoperative Days 1 and 2.
Complication Measures (Medicare patients): Healthcare Acquired Conditions	Serious reportable events in healthcare (never events). Pressure ulcer prevalence and incidence by severity. Catheter-associated UTI.
Hospital Inpatient Cancer Care Measures	Patients with early stage breast cancer who have evaluation of the axilla. College of American Pathologists breast cancer protocol. Surgical resection includes at least 12 nodes. College of American Pathologists Colon and rectum protocol. Completeness of pathologic reporting.
Serious Reportable Events in Healthcare ("Never Events")	Surgery performed on the wrong body part. Surgery performed on the wrong patient. Wrong surgical procedure on a patient. Retention of a foreign object in a patient after surgery or other procedure. Intraoperative or immediately post-operative death in a normal health patient (defined as a Class 1 patient for purposes of the American Society of Anesthesiologists patient safety initiative). Patient death or serious disability associated with the use of contaminated drugs, devices, or biologics provided by the healthcare facility. Patient death or serious disability associated with the use or function of a device in patient care in which the device is used or functions other than as intended. Patient death or serious disability associated with intravascular air embolism that occurs while being cared for in a healthcare facility. Patient death or serious disability associated with patient elopement (disappearance) for more than four hours. Patient suicide, or attempted suicide resulting in serious disability, while being cared for in a healthcare facility. Patient death or serious disability associated with a medication error (e.g., error involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation, or wrong route of administration). Patient death or serious disability associated with a hemolytic reaction due to the administration of ABO-incompatible blood or blood products.

POSSIBLE MEASURES AND MEASURE SETS FOR THE RHQDAPU PROGRAM FOR FY 2011 AND SUBSEQUENT YEARS—Continued

Topic	Quality measure
	Patient death or serious disability associated with hypoglycemia, the onset of which occurs while the patient is being cared for in a health care facility. Stage 3 or 4 pressure ulcers acquired after admission to a health care facility. Patient death or serious disability due to spinal manipulative therapy. Patient death or serious disability associated with an electric shock while being cared for in a healthcare facility. Any incident in which a line designated for oxygen or other gas to be delivered to a patient contains the wrong gas or is contaminated by toxic substances. Patient death or serious disability associated with a burn incurred from any source while being cared for in a health care facility. Patient death associated with a fall while being cared for in a health care facility. Patient death or serious disability associated with the use of restraints or bedrails while being cared for in a health care facility. Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed health care provider. Abduction of a patient of any age. Sexual assault on a patient within or on the grounds of a health care facility. Death or significant injury of a patient or staff member resulting from a physical assault (i.e., battery) that occurs within or on the grounds of a health care facility.
Average Length of Stay Coupled with Global Readmission Measure: Preventable Hospital-Acquired Conditions (HACs)	Catheter-Associated Urinary Tract Infection (UTI). Vascular Catheter-Associated Infection. Surgical Site Infections—Mediastinitis after Coronary Artery Bypass Graft (CABG). Surgical Site Infections following Elective Procedures—Total Knee Replacement, Laparoscopic Gastric Bypass, Litigation and Stripping of Varicose Veins. Legionnaires' Disease. Glycemic Control—Diabetic Ketoacidosis, Nonketotic Hypersmolar Coma, Hypoglycemic Coma. Iatrogenic pneumothorax. Delirium. Ventilator-Associated Pneumonia (VAP). Deep Vein Thrombosis (DVT)/Pulmonary Embolism (PE). Staphylococcus aureus Septicemia. Clostridium-Difficile Associated Disease (CDAD). Methicillin-Resistant Staphylococcus aureus (MRSA).

Appendix F: AHRQ Hospital Patient Safety Culture Survey[12]

INSTRUCTIONS

This survey asks for your opinions about patient safety issues, medical error, and event reporting in your hospital and will take about 10 to 15 minutes to complete.

- *An "event" is defined as any type of error, mistake, incident, accident, or deviation, regardless of whether or not it results in patient harm.*
- *"Patient safety" is defined as the avoidance and prevention of patient injuries or adverse events resulting from the processes of health care delivery.*

SECTION A: Your Work Area/Unit

In this survey, think of your "unit" as the work area, department, or clinical area of the hospital where you spend *most* of your work time or provide *most* of your clinical services.

What is your primary work area or unit in this hospital? Mark ONE answer by filling in the circle.

○ a. Many different hospital units/No specific unit

○ b. Medicine (non-surgical)	○ g. Intensive care unit (any type)	○ l. Radiology
○ c. Surgery	○ h. Psychiatry/mental health	○ m. Anesthesiology
○ d. Obstetrics	○ i. Rehabilitation	○ n. Other, please specify:
○ e. Pediatrics	○ j. Pharmacy	
○ f. Emergency department	○ k. Laboratory	

Please indicate your agreement or disagreement with the following statements about your work area/unit. Mark your answer by filling in the circle.

Think about your hospital work area/unit…	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
1. People support one another in this unit	①	②	③	④	⑤
2. We have enough staff to handle the workload.....	①	②	③	④	⑤

[12]Toolkit for survey administration, including administration specifications and procedures, may be found at: http://www.ahrq.gov/qual/hospculture/#toolkit. Last accessed: July 16, 2008.

3. When a lot of work needs to be done quickly, we work together as a team to get the work done	①	②	③	④	⑤
4. In this unit, people treat each other with respect	①	②	③	④	⑤
5. Staff in this unit work longer hours than is best for patient care	①	②	③	④	⑤
6. We are actively doing things to improve patient safety	①	②	③	④	⑤
7. We use more agency/temporary staff than is best for patient care	①	②	③	④	⑤
8. Staff feel like their mistakes are held against them	①	②	③	④	⑤
9. Mistakes have led to positive changes here	①	②	③	④	⑤
10. It is just by chance that more serious mistakes don't happen around here.....	①	②	③	④	⑤
11. When one area in this unit gets really busy, others help out	①	②	③	④	⑤
12. When an event is reported, it feels like the person is being written up, not the problem	①	②	③	④	⑤

SECTION A: Your Work Area/Unit (continued)

Think about your hospital work area/unit…	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
13. After we make changes to improve patient safety, we evaluate their effectiveness	①	②	③	④	⑤
14. We work in "crisis mode" trying to do too much, too quickly	①	②	③	④	⑤
15. Patient safety is never sacrificed to get more work done	①	②	③	④	⑤
16. Staff worry that mistakes they make are kept in their personnel file.....	①	②	③	④	⑤
17. We have patient safety problems in this unit	①	②	③	④	⑤
18. Our procedures and systems are good at preventing errors from happening.....	①	②	③	④	⑤

SECTION B: Your Supervisor/Manager

Please indicate your agreement or disagreement with the following statements about your immediate supervisor/manager or person to whom you directly report. Mark your answer by filling in the circle.

	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
1. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	①	②	③	④	⑤
2. My supervisor/manager seriously considers staff	①	②	③	④	⑤

suggestions for improving patient safety .....

3.	Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts ..	①	②	③	④	⑤
4.	My supervisor/manager overlooks patient safety problems that happen over and over	①	②	③	④	⑤

SECTION C: Communications

How often do the following things happen in your work area/unit? Mark your answer by filling in the circle.

Think about your hospital work area/unit…	Never ▼	Rarely ▼	Some-times ▼	Most of the time ▼	Always ▼
1. We are given feedback about changes put into place based on event reports	①	②	③	④	⑤
2. Staff will freely speak up if they see something that may negatively affect patient care	①	②	③	④	⑤
3. We are informed about errors that happen in this unit	①	②	③	④	⑤
4. Staff feel free to question the decisions or actions of those with more authority.....	①	②	③	④	⑤
5. In this unit, we discuss ways to prevent errors from happening again	①	②	③	④	⑤
6. Staff are afraid to ask questions when something does not seem right	①	②	③	④	⑤

SECTION D: Frequency of Events Reported

In your hospital work area/unit, when the following mistakes happen, *how often are they reported?* Mark your answer by filling in the circle.

	Never ▼	Rarely ▼	Some-times ▼	Most of the time ▼	Always ▼
1. When a mistake is made, but is *caught and corrected before affecting the patient*, how often is this reported?.....	①	②	③	④	⑤
2. When a mistake is made, but has *no potential to harm the patient*, how often is this reported?.....	①	②	③	④	⑤
3. When a mistake is made that *could harm the patient*, but does not, how often is this reported?.....	①	②	③	④	⑤

SECTION E: Patient Safety Grade

Please give your work area/unit in this hospital an overall grade on patient safety. Mark ONE answer.

○	○	○	○	○
A	**B**	**C**	**D**	**E**
Excellent	Very Good	Acceptable	Poor	Failing

SECTION F: Your Hospital

Please indicate your agreement or disagreement with the following statements about your hospital. Mark your answer by filling in the circle.

Think about your hospital…	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
1. Hospital management provides a work climate that promotes patient safety	①	②	③	④	⑤
2. Hospital units do not coordinate well with each other	①	②	③	④	⑤
3. Things "fall between the cracks" when transferring patients from one unit to another	①	②	③	④	⑤
4. There is good cooperation among hospital units that need to work together	①	②	③	④	⑤
5. Important patient care information is often lost during shift changes	①	②	③	④	⑤
6. It is often unpleasant to work with staff from other hospital units	①	②	③	④	⑤
7. Problems often occur in the exchange of information across hospital units	①	②	③	④	⑤
8. The actions of hospital management show that patient safety is a top priority	①	②	③	④	⑤
9. Hospital management seems interested in patient safety only after an adverse event happens	①	②	③	④	⑤
10. Hospital units work well together to provide the best care for patients	①	②	③	④	⑤
11. Shift changes are problematic for patients in this hospital	①	②	③	④	⑤

SECTION G: Number of Events Reported

In the past 12 months, how many event reports have you filled out and submitted? Mark ONE answer.

- ○ a. No event reports
- ○ b. 1 to 2 event reports
- ○ c. 3 to 5 event reports
- ○ d. 6 to 10 event reports
- ○ e. 11 to 20 event reports
- ○ f. 21 event reports or more

SECTION H: Background Information

This information will help in the analysis of the survey results. Mark ONE answer by filling in the circle.

1. How long have you worked in this hospital?
   - ○ a. Less than 1 year
   - ○ b. 1 to 5 years
   - ○ c. 6 to 10 years
   - ○ d. 11 to 15 years
   - ○ e. 16 to 20 years
   - ○ f. 21 years or more
2. How long have you worked in your current hospital work area/unit?
   - ○ a. Less than 1 year
   - ○ b. 1 to 5 years
   - ○ c. 6 to 10 years
   - ○ d. 11 to 15 years
   - ○ e. 16 to 20 years
   - ○ f. 21 years or more
3. Typically, how many hours per week do you work in this hospital?
   - ○ a. Less than 20 hours per week
   - ○ d. 60 to 79 hours per week

- ○ b. 20 to 39 hours per week
- ○ c. 40 to 59 hours per week
- ○ e. 80 to 99 hours per week
- ○ f. 100 hours per week or more

4. What is your staff position in this hospital? Mark ONE answer that best describes your staff position.
   - ○ a. Registered Nurse
   - ○ b. Physician Assistant/Nurse Practitioner
   - ○ c. LVN/LPN
   - ○ d. Patient Care Assistant/Hospital Aide/Care Partner
   - ○ e. Attending/Staff Physician
   - ○ f. Resident Physician/Physician in Training
   - ○ g. Pharmacist
   - ○ h. Dietician
   - ○ i. Unit Assistant/Clerk/Secretary
   - ○ j. Respiratory Therapist
   - ○ k. Physical, Occupational, or Speech Therapist
   - ○ l. Technician (e.g., EKG, Lab, Radiology)
   - ○ m. Administration/Management
   - ○ n. Other, please specify:

5. In your staff position, do you typically have direct interaction or contact with patients?
   - ○ a. YES, I typically have direct interaction or contact with patients.
   - ○ b. NO, I typically do NOT have direct interaction or contact with patients.

6. How long have you worked in your current specialty or profession?
   - ○ a. Less than 1 year
   - ○ b. 1 to 5 years
   - ○ c. 6 to 10 years
   - ○ d. 11 to 15 years
   - ○ e. 16 to 20 years
   - ○ f. 21 years or more

SECTION I: Your Comments

Please feel free to write any comments about patient safety, error, or event reporting in your hospital.

THANK YOU FOR COMPLETING THIS SURVEY.

Appendix G: CMS Medicare Conditions of Hospital Participation Regulations

Title 42--Public Health

CHAPTER IV--CENTERS FOR MEDICARE & MEDICAID SERVICES, DEPARTMENT OF HEALTH AND HUMAN SERVICES (CONTINUED)

PART 482--CONDITIONS OF PARTICIPATION FOR HOSPITALS

482.60 Special provisions applying to psychiatric hospitals.

482.61 Condition of participation: Special medical record requirements for psychiatric hospitals.

482.62 Condition of participation: Special staff requirements for psychiatric hospitals.

482.66 Special requirements for hospital providers of long-term care services (``swing-beds").

Appendix H: Breast and Colorectal Cancer Quality Measures Background and Specifications[13]

Commission on Cancer Accreditation
National Cancer Database (NCDB)

National Quality Forum Endorsed Commission on Cancer Accountability Measures for Quality of Cancer Care for Breast and Colorectal Cancers

First Posted: April 12, 2007

Last Updated: May 14, 2007

Background

The Commission on Cancer (CoC) of the American College of Surgeons (ACoS) submitted quality of care measures for breast and colorectal cancer to the National Quality Forum (NQF) in response to its call for proposed breast measures in late 2004 and colorectal measures in early 2005. Measures were reviewed by the CoC's breast and colorectal disease site teams prior to their submission to the NQF for consideration.

A NQF Steering Committee for quality of cancer care measures was charged with assuring that pertinent stakeholders had appropriate opportunity review and provide input on the measures under consideration. Two Technical Panels assembled by the NQF made up of breast and colorectal experts in the areas of surgery, radiotherapy, medical oncology, health care consumers, and health services research provided technical evaluation of the proposed measures. The NQF Steering Committee and Technical panels reviewed measures using four criteria:

- *importance*: the extent to which a measure reflects variation that has the potential for improvement;
- *scientific acceptability*: that a measure is reliable, valid, precise, and adaptable to patient preference;
- *usability*: information produced as part of the measure could be used to make decisions and/or take actions, and that reported performance levels were statistically, and clinically meaningful;
- *feasibility*: that data can be obtained within the normal flow of clinical care and that implementation of the measure was achievable.

Development

Eight measures proposed by the CoC (four breast cancer, three colon cancer, and one rectal cancer) were reviewed by the NQF. In response to specific comments from the NQF, the CoC examined additional data and made revisions to the originally proposed measures. Five measures were determined to meet the evaluation criteria established by the NQF and are specified in the following tables.

Cancer registry data elements are nationally standardized and considered open source. Each

[13] Found at: http://www.facs.org/cancer/qualitymeasures.html. Last accessed: July 16, 2008.

of these measures was developed by the CoC with the expectation that cancer registries would be used to collect the necessary data to assess and monitor concordance with the measures. Extensive assessment and validation of the measures was performed using cancer registry data reported to the National Cancer Data Base (NCDB).

All measures are designed to assess performance at the hospital or systems-level, and are not intended for application to individual physician performance.

Four measures were endorsed by the NQF as *accountability measures*, meaning that these measures can be used for such purposes as public reporting, payment incentive programs, and the selection of providers by consumers, health plans, or purchasers. *Quality improvement* measures are intended to be used for internal monitoring of performance within an organization or group so that analyses and subsequent remedial actions can be taken, as appropriate.

Through a parallel process the American Society for Clinical Oncology (ASCO) and the National Comprehensive Cancer Network (NCCN) developed a similar set of measures for breast and colorectal cancer. Facilitated by the NQF, the CoC, ASCO, and NCCN agreed to synchronize their developed measures to ensure that a unified set were put forth to the public.

Breast Cancer Measures submitted by the CoC to the National Quality Forum (NQF) and endorsed by the NQF in April 2007. **Through a collaborative process, the CoC, ASCO and NCCN have agreed upon common specifications of the measures below.**			
Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer.			
Application	Type	Denominator	Numerator
Hospital or systems-level performance	Accountability	• Women • Age 18-69 at time of diagnosis • Known or assumed first or only cancer diagnosis • Primary tumors of the breast • Epithelial invasive malignancy only • AJCC Stage I, II, or III • Surgically treated by breast conservation surgery (surgical excision less than mastectomy) • All or part of first course of treatment performed at the reporting facility • Known to be alive within 1 year (365 days) of diagnosis	Radiation therapy to the breast initiated within 1 year (365 days) of date of diagnosis
Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0M0, or Stage II or III hormone receptor negative breast cancer.			

Application	Type	Denominator	Numerator
Hospital or systems-level performance	Accountability	• Women • Age 18-69 at time of diagnosis • Known or assumed first or only cancer diagnosis • Primary tumors of the breast • Epithelial invasive malignancy only • AJCC T1cN0M0, or Stage II or III • Primary tumor is estrogen receptor negative *and* progesterone receptor negative • All or part of first course of treatment performed at the reporting facility • Known to be alive within 4 months (120 days) of diagnosis	Consideration or administration of multi-agent chemotherapy initiated within 4 months (120 days) of date of diagnosis
Tamoxifen *or* third generation aromatase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1cN0M0, or Stage II or III hormone receptor positive breast cancer.			
Application	Type	Denominator	Numerator
Hospital or systems-level performance	Accountability	• Women • Age >=18 at time of diagnosis • Known or assumed first or only cancer diagnosis • Epithelial invasive malignancy only • AJCC T1cN0M0, or Stage II or III • Primary tumor is estrogen receptor positive *or* progesterone receptor positive • All or part of first course of treatment performed at the reporting facility • Known to be alive within 1 year (365 days) of diagnosis	Consideration or administration of tamoxifen *or* third generation aromatase inhibitor initiated within 1 year (365 days) of date of diagnosis
Colon Cancer Measure submitted by the CoC to the National Quality Forum			

7(NQF) and endorsed by the NQF in April 2007. Through a collaborative process, the CoC, ASCO and NCCN have agreed upon common specifications of the measures below.			
Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer.			
Application	Type	Denominator	Numerator
Hospital or systems-level performance	Accountability	• Age 18-79 at time of diagnosis • Known or assumed to be first or only cancer diagnosis • Primary tumors of the colon • Epithelial invasive malignancy only • AJCC Stage III • All or part of first course of treatment performed at the reporting facility • Known to be alive within 4 months (120 days) of diagnosis	Consideration or administration of chemotherapy initiated within 4 months (120 days) of date of diagnosis

Current Activities

The Cancer Program Practice Profile Reports (*CP^{3}R)* for Stage III colon cancer released in January 2005, and Electronic Quality Improvement Packets (*e-QuIP)* for breast and colorectal cancers, released in October 2006 and March 2007 respectively, have demonstrated that improvements in data quality can demonstrate the quality of patient care when the entire cancer committee supports system-level enhancements to ensure complete and precise documentation. Specifically, the *e-QuIP* reports provide CoC-Approved Cancer Programs with a preliminary examination of program-specific breast and colorectal cancer care practices and promote quality improvement activities in anticipation of the endorsement by the NQF of the measures documented here.

Next Steps

The CoC has begun development of reporting templates for each of these measures using data reported by cancer registries from CoC-Approved Cancer Programs. All three organizations (CoC, ASCO, and NCCN) have agreed that implementation of these measures necessitates reporting concordance rates for administered therapy, considered therapy, and an aggregate rate. This approach will facilitate the identification of hospitals or systems that report disproportionately high rates of performance outside the recommended considered therapy regimens, potentially promoting educational interventions and improving care at the local level.

The measures will be updated regularly to reflect changes in evidence-based findings in consultation with ASCO and NCCN.